

Zearn

Supplemental English Mathematics, 1

Zearn Math for Texas, Grade 1

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	9798888683880	Both Print and Digital	Adaptive

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	169	3	Flags Not in Report	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	19 out of 21	90%
2. Progress Monitoring	15 out of 19	79%
3. Supports for All Learners	33 out of 37	89%
4. Depth and Coherence of Key Concepts	16 out of 16	100%
5. Balance of Conceptual and Procedural Understanding	38 out of 38	100%
6. Productive Struggle	19 out of 19	100%

Breakdown by Suitability Noncompliance and Excellence Categories

SUITABILITY NONCOMPLIANCE FLAGS BY CATEGORY	IMRA REVIEWERS	PUBLIC	Flags NOT Addressed by November Vote
1. Prohibition on Common Core	0	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	0	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	0
Category 6: Promoting Sexual Risk Avoidance	0

IMRA Quality Report

1. Intentional Instructional Design

Materials support educators in effective implementation through intentional course and lesson-level design.

1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	5/5
1.1b	All criteria for guidance met.	3/3
1.1c	Materials do not include diagnostic assessments with an accompanying TEKS correlation guide, and recommended skill entry points.	0/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	TOTAL	12/14

1.1a – Materials include an alignment guide outlining the TEKS, ELPS, and concepts covered, with a rationale for learning paths across grade levels (vertical alignment) and within the same grade level (horizontal alignment) as designed in the materials.

The grade 1 "Course Guide" includes comprehensive alignment tables that clearly map each lesson to the Texas Essential Knowledge and Skills (TEKS), English Language Proficiency Standards (ELPS), and Mathematical Process Standards, allowing educators to easily identify when and where standards are addressed throughout the year.

A visual "Progression of Mathematical Concepts" chart, spanning kindergarten through grade 5, supports vertical alignment by showing how key concepts evolve across grade levels, using color coding to distinguish domains like Whole Numbers, Geometry, and Measurement.

Each mission includes a detailed overview that outlines the rationale for the sequence of topics, reinforcing horizontal alignment within the grade. For example, Mission 5 builds on students' prior knowledge of shapes to deepen their understanding, using precise mathematical language and hands-on exploration.

1.1b – Materials include an implementation guide with usage recommendations and strategies for effective educator use in various contexts, such as just-in-time supports, advanced learning, or as a course.

The grade 1 "Course Guide" provides comprehensive guidance on effective classroom implementation, emphasizing a balanced model of independent digital lessons and targeted small-group instruction, supported by clear routines and real-time student performance data.

Materials offer strong teacher supports, including just-in-time scaffolds within adaptive digital lessons, real-time performance alerts (such as "Tower and Sprint Alerts"), and guidance for reteaching or enriching instruction based on individual student needs using data from Student Reports.

Each mission includes an implementation guide with practical recommendations for different classroom contexts. These guides outline how to structure instruction, adapt materials for accessibility, and use optional enrichment activities, such as digital bonuses and discussion prompts, to extend learning.

1.1c – Materials include a TEKS correlation guide with recommended skill entry points based on diagnostic assessment results.

While TEKS-aligned lesson mapping is provided in both the grade 1 "Course Guide" and "Mission Overview," the materials do not include a diagnostic assessment or a correlation guide that recommends instructional entry points based on student performance data.

Although the program offers adaptive digital lessons and real-time data to identify student learning needs, it lacks explicit guidance for using diagnostic results to determine initial placement or to tailor instructional starting points.

The materials provide a "TEKS Correlation Guide" that identifies where each standard is addressed within specific lessons and missions, supporting alignment with grade-level instruction; for example, TEKS 1.2B is linked to multiple lessons across Missions 1–3.

1.1d – Materials include protocols with corresponding guidance for unit and lesson internalization.

Each grade 1 Mission includes a comprehensive "Mission Overview" that provides a conceptual summary of the unit, outlines standards and objectives, and breaks down the progression of topics with explanations of how current learning connects to prior and future content, supporting teacher internalization of the unit's learning goals.

Teacher lesson materials follow a consistent structure—Warm-Up, Concept Exploration, Independent Practice, and Wrap-Up—with embedded notes and synthesis questions that help guide educators in lesson preparation and instructional focus, including vocabulary and common student misconceptions.

The materials offer detailed topic-level guidance within each "Mission Overview," including examples of visual models and instructional strategies (e.g., number bonds, straw models), enabling teachers to anticipate student responses and effectively plan for conceptual development across a unit.

1.1e – Materials include resources and guidance for instructional leaders to support educators with implementing the materials as designed.

The materials include "Admin Reports" that provide instructional leaders with real-time data at the school, grade, and classroom levels, including metrics such as student login rates, lesson completion, usage minutes, and "Tower Alerts," enabling administrators to monitor implementation, celebrate successes, and target support.

Instructional leaders are supported with a "Classroom Walk-Through Guide" that includes clear "look-fors" to assess implementation fidelity and facilitate meaningful coaching conversations with educators based on observed instructional practices.

Both the "School Lead Playbook" and "District Lead Playbook" offer detailed guidance on program preparation, launch, and ongoing support, including checklists, training resources, pre-drafted communications, and strategies for integrating *Zearn* into daily schedules, empowering leaders to drive successful and sustainable implementation.

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	This guidance is not applicable to the program.	N/A
1.2b	All criteria for guidance met.	5/5
1.2c	All criteria for guidance met.	2/2
—	TOTAL	7/7

1.2a – If designed to be static, materials include detailed lesson plans with learning objectives, teacher and student materials, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.

This guidance is not applicable because the program is not designed to be static.

1.2b – If designed to be adaptive, materials include detailed lesson overviews with learning objectives, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.

The materials include a comprehensive "Mission Overview" that outlines key concepts and learning progressions aligned to the TEKS. Each mission clearly defines objectives that build foundational understanding and prepare students for future mathematical concepts.

Suggested time frames for each component of the teacher-led lesson materials are found in the "Course Guide." This is designed to help teachers plan and pace small-group instruction more efficiently and implement lessons with confidence.

Each mission includes assessment keys that identify the specific TEKS standards addressed and where they appear in the lesson sequence. The assessments also feature a table outlining the ELPS objectives, with each rubric row aligned to specific ELPS goals. This comprehensive approach enables educators to evaluate how student responses demonstrate progress in both content mastery and language development.

1.2c – Materials contain support for families in Spanish and English for each unit, with suggestions on supporting the progress of their student(s).

The materials provide "Family Materials" for each Mission in both English and Spanish, offering overviews of the unit and its topics, along with explanations of key terms and models students will encounter.

"Family Materials" include sample problems and practical ideas, such as games, questions, and everyday activities that families can use to support their child's math learning at home.

A *Zearn* "Parent Letter" is available in English, Spanish, and eight additional languages. It introduces families to the program, provides a QR code for access, and shares tips for supporting student learning outside the classroom.

2. Progress Monitoring

Materials support educators in effective implementation through frequent, strategic opportunities to monitor and respond to student progress.

2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	All criteria for guidance met.	2/2
2.1b	All criteria for guidance met.	2/2
2.1c	Materials do not include printable versions of digital assessments, nor do they include the enabling or disabling of text-to-speech features, content and language supports, or calculators.	Not Scored
2.1d	Materials do not include diagnostic assessments prior to instruction that provide detailed information about a student's current knowledge.	0/4
2.1e	All criteria for guidance met.	4/4
—	TOTAL	8/12

2.1a – Materials include the definition and intended purpose for the types of instructional assessments.

The materials define and explain the intended purpose of various instructional assessments across lesson and mission levels. These include "Lesson Checkpoints"—low-stakes, formative assessments embedded in digital lessons that provide immediate, scaffolded support—and the "Tower of Power," a scaffolded, mastery-based assessment that ensures students have internalized key concepts before progressing in their digital sequence.

At the Mission level, materials offer two types of assessments: the "Mission-Level Assessment," which utilizes open-ended tasks to evaluate conceptual understanding, reasoning, and problem-solving skills; and "Selected Response Practice," which replicates STAAR item formats to help students become familiar with standardized assessment structures. Both assessments are supported by rubrics and answer keys to inform instruction.

The "Course Guide" and teacher-facing materials define each assessment type and describe how they support instructional decision-making. Together, these assessments offer a comprehensive view of student learning, helping teachers plan small-group instruction, support unfinished learning, and ensure students stay on track with grade-level proficiency.

2.1b – Materials include guidance to ensure consistent and accurate administration of instructional assessments.

Materials include detailed teacher guidance to support consistent and accurate administration of "mission-level assessments." Scripts are provided with specific language for teachers to use, along with

instructions for translating for emergent bilingual students, managing student unresponsiveness, and taking detailed observation notes to capture student understanding.

Clear procedures are outlined for scoring and interpreting student responses, including directions on how to adjust scoring based on the level of support provided during the assessment. For example, if a student requires significant prompting, the materials instruct teachers to lower the demonstrated level of understanding, ensuring results reflect independent performance.

Assessment materials, such as answer keys and teacher guides, support consistent administration practices by including preparation steps, timing suggestions, and examples of expected student behavior. These tools support consistent administration practices, enabling teachers to gather reliable data to inform instruction.

2.1c – Digital assessments include printable versions and accommodations, including text-to-speech, content and language supports, and calculators, that educators can enable or disable to support individual students.

The materials do not include printable versions of digital lesson assessments, which may limit accessibility options for some students. Only "Mid-Mission and End-of-Mission" assessments are available in printable format.

Digital assessments include on-screen read-aloud capability, where students can click an audio icon to hear text read aloud. However, there is no feature for educators to enable or disable this support for individual students, limiting the ability to personalize accommodations based on specific student needs.

The materials do not include a built-in calculator feature, nor do they offer options for educators to customize (enable/disable) content and language supports. This limits teachers' ability to tailor digital assessments to support students' specific needs.

2.1d – Materials include diagnostic assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.

Materials do not include formal diagnostic assessments prior to instruction that would provide detailed information about a student's current knowledge, skills, strengths, and learning needs. The "Tower of Power"—a scaffolded, mastery-based assessment—is found at the end of each digital lesson; it includes two to four stages that increase in complexity and decrease in scaffolding, ensuring students grasp key concepts before progressing.

Materials include TEKS-aligned tasks and questions, with teacher-facing assessment keys that specify which standards are addressed in each item. In addition to digital assessments, teachers can administer middle-of-unit and end-of-unit paper-based assessments to further monitor student progress and mastery of content.

Assessments feature interactive item types with varying complexity levels, including multiple choice, text entry, drag-and-drop, open numeric entry, and the use of digital manipulatives. These formats offer diverse ways for students to demonstrate understanding and help teachers gather detailed diagnostic information.

2.1e – Materials include a variety of formative assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.

Assessments feature interactive item types with varying complexity levels, including multiple choice, text entry, drag-and-drop, open numeric entry, and the use of digital manipulatives. These formats offer diverse ways for students to demonstrate understanding and help teachers gather detailed diagnostic information.

The materials offer a range of formative assessments aligned to the TEKS, including digital lesson checkpoints, scaffolded "Towers of Power," exit tickets, "Mission-Level Assessments," and selected-response practice. A TEKS alignment chart is included to help teachers connect assessment items to standards within each mission.

Formative assessments vary in complexity and structure, such as the "Tower of Power," which features two to four progressively challenging stages with decreasing scaffolding. These assessments allow teachers to monitor understanding at multiple levels of cognitive demand and provide real-time feedback and support when students struggle.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	All criteria for guidance met.	3/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	This guidance is not applicable to the program.	N/A
2.2e	All criteria for guidance met.	1/1
—	TOTAL	7/7

2.2a – Instructional assessments include scoring information and guidance for interpreting student performance, including rationale for each correct and incorrect response.

The materials provide rationales for correct answers in all Selected Response Practice. For example, in Mission 1, Question 1 informs teachers of the problem type and details students' understanding by selecting the correct answer.

The materials provide rationales for each incorrect response as well. For example, in Mission 1, the key clarifies why an answer is incorrect and what misconceptions may be reflected in each incorrect response. This provides an opportunity for teachers to better understand where students are in their learning.

The instructional materials include scoring rubrics and answer keys for mid- and end-of-mission assessments, offering clear guidance to help teachers interpret student performance across multiple scoring levels. These rubrics outline expected behaviors at each level of mastery—from minimal understanding to fully accurate and independent responses.

2.2b – Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments.

The instructional materials include multiple reports and tools—such as the Tower Alerts Report and Progress Reports—that help teachers identify where students are repeatedly struggling. Teachers have the ability to assign lessons given the alerts regarding challenging topics. These tools provide specific follow-up recommendations, enabling teachers to assign targeted small-group lessons and foundational content based on individual student needs.

The "Course Guide" and educator dashboard support real-time instructional adjustments by offering visualizations of class- and student-level data. Teachers are guided to use this information to address unfinished learning, reinforce grade-level concepts, and support student progress through small-group instruction and differentiated tasks.

"Foundational Guidance" aligned to each topic further assists teachers in selecting appropriate lessons when students show signs of difficulty. Additionally, Sprint Alerts and Tower Alerts identify fluency- and content-based struggles, allowing educators to tailor interventions and monitor trends in student understanding over time.

2.2c – Materials include tools for teachers to track student progress and growth, and tools for students to track their own progress and growth.

The materials include a "Student Progress Tool" that allows students to reflect on their own learning and monitor their progress. It also provides teachers with the opportunity to guide conversations with students regarding their strengths, areas for development, and strategies for growth.

The instructional materials do offer various tools for tracking student progress, including Pace Reports, Progress Reports, Tower and Sprint Alerts, and Student Reports. These resources allow teachers to monitor lesson completion, identify areas of struggle or success, and assign targeted interventions based on individual student needs.

Students also have access to tracking tools such as the Weekly Goal Tracker, Challenge Tracker, and "digital badges," which promote accountability and motivation by visually representing lesson completion and goal achievement. The "Brainy Challenge" further supports goal-setting and family engagement.

2.2d – If designed to be static, materials provide prompts and guidance to support educators in conducting frequent checks for understanding at key points throughout each lesson or activity.

This guidance is not applicable because the program is not designed to be static.

2.2e – If designed to be adaptive, materials provide frequent checks for understanding at key points throughout each lesson or activity.

The digital lessons incorporate multiple checkpoints throughout each lesson to ensure continuous monitoring of student understanding. These frequent checks help identify misconceptions early and provide opportunities for immediate feedback and correction.

When students encounter challenges, the digital platform offers immediate, integrated support features, such as dividing problems into smaller steps, providing digital manipulatives, and delivering targeted guidance. This scaffolded support enables students to progress at their own pace and develop confidence as they work toward independent mastery.

Each lesson concludes with a "Tower of Power" assessment, a scaffolded, mastery-based task that gradually increases in difficulty while providing decreasing levels of support as students advance. This

structure, combined with resources such as "Math Chats" and interactive videos, enables students to learn at their own pace and receive targeted assistance when necessary.

3. Supports for All Learners

Materials support educators in reaching all learners through design focused on engagement, representation, and action/expression for learner variability.

3.1 Differentiation and Scaffolds

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	1/1
3.1b	All criteria for guidance met.	4/4
3.1c	Materials do not provide explicit educator guidance for enrichment and extension activities tailored to students who demonstrate proficiency in above grade-level content and skills.	1/2
3.1d	Materials do not provide an option for educators to enable or disable accommodations for individual students, such as text-to-speech features, content and language supports, or calculators.	0/3
3.1e	All criteria for guidance met.	2/2
—	TOTAL	8/12

3.1a – Materials include explicit educator guidance for lessons or activities scaffolded for students who have not yet reached proficiency in prerequisite or grade-level concepts and skills.

Materials include explicit educator guidance for scaffolding during small-group instruction, particularly in "Concept Exploration" and "Fluency Practice," where teachers address misconceptions, provide hands-on modeling, and give immediate feedback. These lessons are designed to strengthen conceptual understanding while allowing students to continue progressing through digital lessons, ensuring that instructional support is responsive to individual learning needs.

The digital components of the program adapt in real time based on student performance, offering step-by-step guidance, targeted hints, video tutorials, and scaffolded support. Features such as "Math Chats," "Learning Labs," and "Z-Squad" incorporate pauses in instruction to assess students' understanding of prerequisite or grade-level concepts. Based on student responses, the program adapts its instructional approach by reviewing, scaffolding, or progressing to the next skill, as appropriate.

Fluency activities involve providing support to students when they encounter challenges. As students engage with the program, assistance is offered as needed through opportunities to retry tasks, provide counting support, and ask guiding questions. These activities aim to strengthen foundational skills, build connections between concepts, reinforce prior learning, and address any unfinished areas of understanding.

3.1b – Materials include explicit educator guidance for language supports, including pre-teaching and embedded supports for developing academic vocabulary and unfamiliar references in text.

The materials include explicit educator guidance for pre-teaching vocabulary before lessons, and there is strong guidance for reinforcing vocabulary during instruction.

Materials provide embedded language supports in both digital lessons and small-group instruction to help students develop academic vocabulary. These supports are designed to address both new and repeated terminology throughout instruction.

Additionally, supports include explicit vocabulary instruction, where key math terms are introduced and reinforced to build academic language. In Mission 3 Lesson 10 (0:30–2:45), students are introduced to the academic vocabulary *picture graph* as a special kind of graph that represents data. They then hear this new term multiple times as they build a picture graph with the on-screen teacher. The pre-taught definition and co-created visual ensures students can understand this new vocabulary as it is used throughout the lesson.

The materials provide guidance on incorporating academic vocabulary, using multiple means of action and expression, and engaging in discussions using new terminology. In the grade 1 "Teacher Lesson Materials" PDF, the materials note, "Display the new vocabulary terms with images in the classroom alongside other terms from this mission."

"Multiple Means of Representation" note provides explicit guidance on pre-teaching the names of the measurement tools using pictures to develop academic vocabulary. The note also advises teachers to narrate the measurement language with an emphasis on the precise measurement terms.

3.1c – Materials include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level and above grade-level content and skills.

The materials do not include explicit educator guidance for supporting students who demonstrate proficiency in above grade-level content and skills. While the instructional materials reference enrichment opportunities such as "Digital Bonuses," optional practice problems, and discussion prompts, these enrichment activities closely mirror core lesson content (grade-level) and do not extend into more advanced mathematical concepts that require deeper reasoning or critical thinking.

The materials offer suggestions for students who demonstrate proficiency in grade-level content and skills. The "Course Guide" indicates that optional practice problems may be used to extend and flexibly reinforce grade-level learning. These resources support problem solving, conceptual understanding, and connecting mathematical ideas beyond the core digital lesson.

Optional practice problems are a printable set of exercises available for each lesson, designed to support reinforcement or extension of the grade-level lesson content. Educators may choose to incorporate these problems for additional practice or to facilitate discussion and reflection during small-group instruction. Additionally, small-group lesson materials include margin notes and discussion prompts to encourage deeper thinking and foster mathematical discourse.

3.1d – Digital materials include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.

The materials do not include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students. In grade 1 lessons, prompts are automatically presented with audio support, and text-to-speech functionality is accessible to all students. Additionally, instructional prompts and directions can be replayed using embedded audio buttons.

3.1e – Materials include educator guidance on offering options and supports for students to demonstrate understanding of mathematical concepts in various ways, such as perform, express, and represent.

The "Teacher Lesson Materials" include educator guidance on offering options and supports for students to demonstrate their understanding of mathematical concepts in various ways. For example, in Mission 2, Topic A, Lesson 2, teachers are prompted to encourage students to solve and share different strategies for solving addition problems using drawings, number bonds, and partner discussion. The lesson emphasizes verbal explanation, visual modeling, and peer comparison to deepen understanding.

The "Teacher Lesson Materials" provide explicit options for how students can be supported in demonstrating their understanding. For example, in Lesson 11, the guide states, "Some students may benefit from additional tools when modeling halves and fourths. Providing rulers can assist students in drawing straight lines, while others may need to cut out or fold paper to accurately represent equal partitions." The materials emphasize an intentional balance between whole-group and independent practice, ensuring all students have multiple opportunities to represent, engage with, and express their mathematical thinking.

Lessons encourage student discourse and reflection, allowing learners to analyze similarities and differences in problem-solving methods. Guidance in the "Multiple Means of Representation" section highlights the use of sentence stems and visuals to support all learners, including emergent bilingual students. Teacher prompts and structured discussions are provided to support students in articulating their thinking.

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	This guidance is not applicable to the program.	N/A
3.2c	All criteria for guidance met.	3/3
3.2d	All criteria for guidance met.	2/2
3.2e	All criteria for guidance met.	2/2
—	TOTAL	12/12

3.2a – Materials include explicit (direct) prompts and guidance for educators to build knowledge by activating prior knowledge, anchoring big ideas, and highlighting and connecting key patterns, features, and relationships through multiple means of representation.

In Mission 2, Lesson 5, teacher materials include explicit guidance that support teachers in anchoring the big idea of using 10 to solve problems. The teacher note indicates that by drawing a number bond to match the story to match the ten frame drawing, students continue to relate the addition facts of 9 with the addition facts of 10. Drawing number bonds, ten frames, number sentences, and writing statements are all multiple means of representation that help students connect visual, numeric, and conceptual understanding of the problem.

Explicit teacher guidance is provided within the word problem activity in Mission 3, Lesson 10. The teacher note explains that students may activate prior knowledge by using any of the methods to organize data from the previous lessons and that the representations should make counting and comparing data more accessible. Additionally, the task builds on students' previous lessons on data organization, prompting them to apply familiar methods independently.

Key features through multiple means of representation appear in Mission 4, Lesson 8, "Fluency Practice," where teachers receive a note indicating that this activity provides practice with both proportional (linking cubes) and non-proportional (coins) representations of tens and ones. Students are encouraged to review the connection between place value and adding or subtracting ten or one. The activity explicitly supports highlighting and connecting key features of number and place value by making the base-ten structure visible and encouraging students to compare models.

3.2b – If designed to be static, materials include educator guidance for effective lesson delivery and facilitation using various instructional approaches.

This guidance is not applicable because the program is not designed to be static.

3.2c – Materials include multi-tiered intervention methods for various types of practice and structures and educator guidance to support effective implementation.

The materials provide a range of intervention tools, including foundational lessons to address unfinished learning, small-group lessons for reteaching or extending grade-level concepts, and fluency materials including "Sprint Alerts" to build automaticity with foundational skills. Instruction is delivered through diverse structures such as whole-group, small-group, and individualized digital work, allowing for flexible, responsive intervention.

Teachers are guided to use real-time digital lesson data, such as "Tower Alert Reports," to identify student needs and determine when to intervene. These data-driven insights support just-in-time instructional decisions, including forming small-groups and delivering scaffolded instruction based on student progress and performance.

The materials provide clear, embedded guidance for implementing intervention across instructional settings. Each small-group lesson includes structured components like "Fluency Practice," "Concept Exploration," "Lesson Synthesis," and "Exit Tickets," along with prompts and routines (e.g., Turn and Talk, Think-Pair-Share) to support effective delivery and promote student engagement and understanding.

3.2d – Materials include enrichment and extension methods that support various forms of engagement, and guidance to support educators in effective implementation.

Materials include enrichment and extension methods that support various forms of engagement, with clear guidance for educators to implement them effectively. In Mission 3, Lesson 5, the materials provide specific guidance for challenging students who are ready for more advanced measurement tasks. Students are encouraged to measure objects in multiple dimensions and compare the results, promoting higher-order thinking.

In Mission 4, Lesson 7, the "Multiple Means of Engagement" section suggests having students generate and answer questions like, "How many more students want to go to the zoo than the museum?" Another extension asks, "If five more students voted for the farmer's market, which option would be the most popular?" This encourages students to explore hypothetical scenarios, supporting flexible reasoning and problem-solving.

The materials include extension methods designed to support multiple forms of student engagement, paired with explicit teacher guidance for effective use. For example, in the Mission 6, Lesson 3 "Concept Exploration," teachers are guided to provide challenging number-guessing activities using clues about tens and ones. Students are asked to identify numbers based on combinations like two tens and 23 ones or nine tens and 14 ones. These extensions encourage deeper thinking and application of place value concepts.

3.2e – Materials include prompts and guidance to support educators in providing timely feedback during lesson delivery.

"Teacher Lesson Materials" include prompts to support educators in providing timely feedback during lesson delivery. Throughout "Warm-Ups (Fluency Practices)," "Concept Explorations," and "Exit Tickets," multiple prompts are embedded to help teachers gauge student understanding of the content in real time. This guidance enables educators to adjust instruction promptly and support student learning effectively.

Digital lessons include features that provide students with real-time feedback and adaptive support as they work independently through grade-level content. These lessons are designed to maintain rigor while allowing students to progress at their own pace. When students struggle, the system generates a "Tower Alerts Report" that and recommends specific Foundational Lessons to address gaps in understanding, enabling targeted, just-in-time intervention aligned with core instruction.

The materials include prompts to support educators in providing timely feedback during lesson delivery through targeted questioning to check for understanding. For example, in Mission 3, Lesson 11, "Concept Exploration," the teacher guides students as they analyze a graph by asking questions like, "What do you notice about this graph that is different from the graphs we used yesterday? What is similar?" and "How did you figure it out?" These prompts help teachers identify misconceptions and offer timely, specific feedback to support student learning.

3.3 Support for Emergent Bilingual Students

An emergent bilingual student is a student who is in the process of acquiring English and has another language as the primary language. The term emergent bilingual student replaced the term English learner in the Texas Education Code 29, Subchapter B after the September 1, 2021 update. Some instructional materials still use English language learner or English learner and these terms have been retained in direct quotations and titles.

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	This guidance is not applicable to the program.	N/A
3.3b	All criteria for guidance met.	4/4
3.3c	All criteria for guidance met.	1/1
3.3d	All criteria for guidance met.	8/8
3.3e	This guidance is not applicable to the program.	N/A
—	TOTAL	13/13

3.3a – If designed to be static, materials include educator guidance on providing and incorporating linguistic accommodations for all levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.

This guidance is not applicable because the program is not designed to be static.

3.3b – If designed to be adaptive, materials include embedded linguistic accommodations for all levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.

The materials provide embedded linguistic accommodations that address the needs of students at all levels of language proficiency, as outlined by the ELPS. These supports are consistently included in the "Multiple Means" notes and offer strategies, such as sentence frames to guide student responses, explicit modeling of academic vocabulary to build language understanding, and structured oral language routines that promote opportunities for practice and application in meaningful contexts.

The materials include notations for teachers to support language development, particularly for emergent bilingual students. In Mission 5, Lesson 7, teachers are prompted to display new vocabulary terms with images and to include them alongside other terms from the mission. The guidance also suggests that beginning and intermediate emergent bilingual students may benefit from discussing and noting translations of these terms, supporting both content access and academic language growth.

The materials include embedded linguistic accommodations for beginning and intermediate levels of language proficiency. For example, in Mission 2, Lesson 1, the "Multiple Means of Engagement" section suggests having students act out number stories to support visualization and comprehension, particularly for beginning and intermediate emergent bilingual students. It also recommends personalizing problems using students' names and familiar contexts.

3.3c – Materials include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs.

The materials include implementation guidance to support educators in effectively using the materials in state approved bilingual/ESL programs. Guidance found in the "Course Guide" outlines how the resource can be flexibly implemented across a variety of models, including dual language, transitional bilingual, ESL pull-out, and ESL content-based. Suggestions for adapting instruction, using digital lessons effectively, and incorporating scaffolds are provided.

While there are resources designed to help teachers preview digital lessons to experience embedded language supports, learn instructional strategies for English Learners—including Spanish translations for K–2—and identify academic language requiring linguistic support, these supports are not linked to state approved bilingual/ESL programs.

Additionally, though there is implementation guidance to support educators in bilingual and ESL settings by including a table that aligns lessons with the ELPS, the ELPS are not included in the "Teacher Lesson Materials," and teachers must consult a separate guide to access the ELPS.

3.3d – Materials include embedded guidance to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse.

In support of developing academic vocabulary and increasing comprehension through oral and written discourse, the materials include embedded guidance that helps emergent bilingual students express mathematical ideas clearly. For example, in Mission 1, Lesson 27, students engage in structured partner talk using sentence frames to explain their reasoning, aligned with ELPS expectations. Written supports also appear in Mission 4, Lesson 4, where students write number sentences and "more than" statements to reinforce place value understanding, and in Mission 1, Lesson 17, where sentence frames guide students in composing complete mathematical responses.

In Mission 3, Lesson 8, teachers introduce key vocabulary like *collecting* and *sorting*, and connect these terms to students' prior experiences to deepen conceptual understanding. In Mission 1, Lesson 1, students complete an open-ended word problem using drawings and numbers, which supports their ability to express mathematical thinking through writing. Mission 3, Lesson 6 also helps build background knowledge by having students preview and discuss measurement tools with teacher narration before using them in problem-solving.

The materials support cross-linguistic connections by embedding guidance that encourages using students' home languages to deepen conceptual understanding through oral and written discourse. For example, in Mission 3, Lesson 1, students review key math terms in their native languages and identify Spanish-English cognates. Additional support appears in Mission 5, Lessons 1 and 4, where vocabulary is paired with visuals and translated through discussion, and students analyze story problem phrases in both English and their first language.

3.3e – If designed for dual language immersion (DLI) programs, materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language.

This guidance is not applicable because the program is not designed for dual language immersion (DLI) programs.

4. Depth and Coherence of Key Concepts

Materials are designed to meet the rigor of the standards while connecting concepts within and across grade levels/courses.

4.1 Depth of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.1a	All criteria for guidance met.	2/2
4.1b	All criteria for guidance met.	4/4
—	TOTAL	6/6

4.1a – Practice opportunities throughout learning pathways (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

The materials include practice opportunities throughout learning pathways that require students to demonstrate depth of understanding aligned to the TEKS. Each lesson integrates conceptual understanding and procedural fluency while promoting mathematical coherence and embedding all process standards through reasoning, modeling, communication, and problem solving.

Instructional and assessment tasks are aligned to the TEKS and vary in complexity to meet diverse learner needs. Examples include "Mid-Mission and End-of-Mission" assessments that require students to explain their reasoning, model with manipulatives, and solve real-world problems using multiple representations, such as drawings, equations, and number sentences.

Throughout the learning pathways, students demonstrate their understanding through guided practice, open-ended discussions, and math chats. Teacher guidance encourages probing for reasoning and explanation, supported by rubrics that track progress from minimal to solid reasoning, ensuring that assessments measure conceptual understanding aligned with the TEKS.

4.1b – Questions and tasks, including enrichment and extension materials, increase in rigor and complexity, leading to grade-level and above grade-level proficiency in the mathematics TEKS.

The materials include practice opportunities and scaffolded assessments that build conceptual understanding and align with the TEKS, with tasks that increase in rigor and complexity. Above-grade-level content is integrated into both digital core lessons and optional supports such as Digital Bonuses and teacher-guided extensions. For example, in the Mission 5, Lesson 12 digital bonus, students have an enrichment opportunity to compare halves and fourths, which exceeds the standard and allows for students to extend their learning.

The materials include practice opportunities and scaffolded assessments that build conceptual understanding and align with the TEKS, with tasks that increase in rigor and complexity. For example, Mission 5 supports understanding of teen numbers through decomposition, while the "Tower of Power" gradually reduces support to help students demonstrate proficiency.

Optional resources like "Digital Bonuses" and extra practice problems that align with the TEKS and provide additional opportunities for students meeting grade-level expectations to deepen engagement. These resources reinforce current TEKS and support future learning by strengthening conceptual understanding and procedural fluency within the kindergarten mission sequence.

4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	All criteria for guidance met.	1/1
4.2c	All criteria for guidance met.	4/4
—	TOTAL	6/6

4.2a – Materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships.

The instructional materials demonstrate coherence within each grade level by connecting concepts across missions and lessons. The "Mission Overview" consistently explains how each mission builds on prior knowledge and prepares students for future learning. They emphasize students' development of addition and subtraction strategies and highlight how students move beyond basic operations to include comparing, combining, and applying properties of operations.

The structure of the mission demonstrates how new knowledge is developed progressively from foundational concepts within grade 1. By expanding upon and linking key topics—such as measurement, standard units, and problem-solving—the instructional materials support a cohesive and continuous learning experience throughout the grade level.

Teachers are supported with scripted lesson notes that highlight these connections and provide instructional insights. These notes guide teachers in reinforcing prior knowledge and preparing students for upcoming content, ensuring lessons build meaningfully on one another to support a coherent learning experience.

4.2b – Materials demonstrate coherence vertically across concepts and grade bands, including connections from grade K–6, by connecting patterns, big ideas, and relationships.

The materials demonstrate clear connections from kindergarten through grade 6 by intentionally building patterns, big ideas, and relationships across grade levels. The "Scope and Sequence" outlines how core concepts are introduced, extended, and deepened through a coherent K–8 learning progression. Examples of coherence include place value, multiplication/division, and fractions—each developed systematically across multiple grades.

Specific examples, such as the use of number bonds in kindergarten through grade 2 and the development of place value understanding through the "Say Ten" method, illustrate how key concepts evolve across grade levels. Overviews within missions explicitly identify how current lessons prepare students for more advanced work in future grades.

This progression is outlined in overarching documents and reinforced within individual lessons, where prior knowledge is routinely activated and new concepts are presented as part of a continuous mathematical journey. The instructional materials extend patterns of thinking, strengthen connections among concepts, and equip students for success in future grade-level learning.

4.2c – Materials demonstrate coherence across lessons or activities by connecting students’ prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current grade level and future grade levels.

The materials demonstrate coherence across lessons and activities by consistently connecting students' prior knowledge to current and future mathematical learning. In Mission 5, students build on foundational understandings of basic shapes and partitioning to compose and decompose more complex figures, deepening their understanding of part-whole relationships and applying this to real-world contexts, like telling time. This integration of concepts supports both conceptual understanding and procedural fluency, preparing students for future work with fractions and time, in alignment with the TEKS.

In Mission 2, coherence is evident as students move from solving problems within 10 to working within 100. The "Mission Overview" explains how strategies introduced in Mission 1—such as counting on—are extended into new methods, like make ten or use ten as one of the parts. These composition and decomposition strategies build on kindergarten foundations and lead into grade 2 place value work, showing a clear trajectory of learning across grade levels.

Teachers are supported through scripted lesson notes and visual progressions that show how kindergarten content connects to grade 1 and beyond. These resources clarify how early mathematical experiences prepare students for more advanced concepts, ensuring coherence within and across grade levels.

4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	All criteria for guidance met.	2/2
4.3b	All criteria for guidance met.	2/2
—	TOTAL	4/4

4.3a – Materials provide spaced retrieval opportunities with previously learned skills and concepts across learning pathways.

The materials provide consistent opportunities for spaced retrieval by incorporating fluency practice that revisits previously learned skills at the start of each lesson. These warm-ups reinforce foundational concepts such as number sense, counting, and part-whole relationships, helping students retain and strengthen prior knowledge.

Adaptive activities like those found in the "Number Gym"—such as "Make and Break," "Number Bond Dash," and "Tell the Hidden Number"—are designed to reinforce learning from earlier missions while preparing students for upcoming content. These activities connect new and prior concepts through concrete, pictorial, and symbolic representations.

Teacher guidance and lesson overviews emphasize how fluency practice builds coherence over time. By repeatedly engaging with earlier skills such as decompositions, number bonds, and counting strategies, students deepen their understanding and are better equipped for more advanced mathematical learning.

4.3b – Materials provide interleaved practice opportunities with previously learned skills and concepts across learning pathways.

The instructional materials provide consistent interleaved practice opportunities by revisiting previously learned skills and concepts across multiple missions and learning pathways. In Mission 1, students explore composing and decomposing numbers within 10 to solve addition and subtraction problems, and this foundational work is extended in Mission 4, where students decompose and compose two-digit numbers into addition equations, such as expressing 34 as $30 + 4$. These activities reflect how earlier number sense is reengaged and applied in more complex contexts.

In Mission 5, the materials connect kindergarten knowledge of shapes to grade 1 geometry by asking students to identify defining attributes of individual shapes, reinforcing and extending prior learning. Similarly, Mission 6 builds on skills like counting, place value, and number comparison, and integrates them into new tasks such as double strip diagrams, money problems, and equations with tens and ones—demonstrating how earlier concepts are embedded in increasingly advanced problem-solving situations.

Fluency practices further promote interleaved learning by reviewing past content, such as coin identification and skip counting, regardless of the current lesson's topic. Students use concrete tools like linking cubes and coin models (dimes and pennies) to simultaneously practice concepts like place value and counting strategies. This intentional integration across lessons—evident in fluency work, problem-solving, and conceptual instruction—supports the development of procedural fluency and conceptual understanding by reinforcing connections among math topics throughout the year.

5. Balance of Conceptual and Procedural Understanding

Materials are designed to balance conceptual understanding, procedural skills, and fluency.

5.1 Development of Conceptual Understanding

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.1a	All criteria for guidance met.	3/3
5.1b	All criteria for guidance met.	2/2
5.1c	All criteria for guidance met.	1/1
—	TOTAL	6/6

5.1a – Questions and tasks provide opportunities for students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations.

Questions and tasks provide opportunities for students to interpret, analyze, and evaluate models and representations of mathematical concepts, such as when students solve word problems using three addends. Students identify combinations that make ten, group and represent numbers with materials like blocks and strings, and explain their reasoning using number sentences and visual models.

Materials guide students to evaluate and compare representations through activities like interpreting picture graphs, identifying defining and non-defining attributes of shapes, and classifying shapes using hands-on tools. These tasks build deeper understanding as students justify and refine their thinking.

Lessons incorporate visual models such as strip diagrams, place value charts, number bonds, and graphing activities to help students make sense of problems. Students are asked to interpret models, select operations, and explain how visual representations connect to mathematical ideas and real-world situations.

5.1b – Questions and tasks provide opportunities for students to create concrete models and pictorial representations to represent mathematical situations.

Questions and tasks provide opportunities for students to create concrete models to represent mathematical situations. In grade 1, students use tools such as "Hide Zero" cards, ten-sticks, and linking cubes to physically model numbers and explore place value concepts like decomposing 17 into 10 and 7. They also build composite shapes and count manipulatives by grouping efficiently, helping solidify abstract ideas through hands-on practice.

Students regularly create pictorial representations to demonstrate mathematical understanding. Activities such as drawing tangram shapes, illustrating story problems (e.g., how many dolls or pencils characters have), and completing number bonds encourage students to visually represent their thinking and problem-solving strategies.

Tasks foster connections between concrete and pictorial models. For example, students transition from organizing physical cubes into tens and ones to drawing number bonds and math pictures that reflect their models. This supports conceptual understanding by linking tactile experiences with visual representations.

5.1c – Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts.

Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts. Students regularly engage in applying strategies, such as counting on, comparing quantities, and using number paths to determine the truth of number sentences. These tasks require students to transfer and apply their mathematical thinking to unfamiliar scenarios, reinforcing understanding through contextual problem-solving.

Instruction moves from structured practice to open-ended application. For example, after using a number path to verify equations like $6 + 4 = 16 - 4$, students apply their understanding by solving a contextual word problem involving comparing the total number of cubes found by two classmates. Similarly, finger counting and flash strategies transition into a story problem where students draw and calculate leaf totals.

Materials promote real-world mathematical thinking. Students measure and compare object lengths, reason about shapes and partitions (e.g., dividing a cookie equally), and interpret data. These experiences help students connect math to everyday contexts—such as determining "how many more" or whether two sets are equal—thereby deepening their conceptual understanding and fluency.

5.2 Development of Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.2a	All criteria for guidance met.	2/2
5.2b	All criteria for guidance met.	3/3
5.2c	All criteria for guidance met.	3/3
5.2d	All criteria for guidance met.	1/1
—	TOTAL	9/9

5.2a – Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level mathematical tasks.

The materials provide tasks designed to build student automaticity and fluency through daily, embedded fluency practice. For example, every grade 1–5 independent digital lesson features "Number Gym," an adaptive fluency activity that strengthens foundational number sense. "Number Gym" activities support students by bridging K–5 math foundations, reinforcing prior skills, and addressing unfinished learning, with students progressing to larger numbers and more challenging tasks as they demonstrate proficiency—promoting automaticity in foundational number sense.

Each lesson "Warm-Up" includes fluency activities designed to support automaticity, such as in Mission 2, Lesson 1, where teachers guide students to count from 10 to 20 using both the regular and "Say Ten" ways (e.g., 10, ten 1, 12, ten 3). The activity includes flexible pacing—counting forward or backward—and interactive group participation, helping students develop fluency within the teen number sequence through repeated, engaging practice.

Materials provide tasks designed to build student automaticity and fluency, which are essential for mastering grade-level mathematical tasks. In Mission 6, Lesson 3, the fluency activity "Subtraction with Cards" supports subtraction within 10, a foundational skill for later work in number decomposition. Students practice mental subtraction in an engaging, game-like format by flipping numeral cards, subtracting the smaller number from the larger, and comparing results—reinforcing fluency through repeated, meaningful practice.

5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures throughout learning pathways.

Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures throughout learning pathways. For example, in Mission 4, Lesson 4, the guided practice digital video presents multiple efficient strategies for solving tens plus ones problems, such as using linking cubes, place value charts, number bonds, expanded form, and writing four related equations. These varied approaches promote procedural flexibility and efficiency. As students transition

to the "Tower of Power," immediate feedback reinforces accuracy by supporting correction and strengthening understanding of tens plus ones.

In Mission 4, Lesson 3, "Concept Exploration," the materials offer opportunities for students to develop and apply flexible and accurate mathematical procedures throughout their learning experiences. Students interpret two-digit numbers in multiple ways—either as tens and some ones or as all ones. Educator guidance supports this flexible thinking through the use of various tools, including fingers, sticks, and hide zero cards.

In the "Course Guide," the materials give students opportunities to practice the application of mathematical procedures during lesson checkpoints. Checkpoints appear at critical moments in digital lessons to ensure students understand essential concepts before progressing. If students struggle, they receive immediate scaffolded support to address misconceptions and continue learning, maintaining momentum through low-stakes, formative assessment.

5.2c – Materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout learning pathways.

Materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy. For example, throughout grade-level activities, students choose their own strategies to solve problems, explain their approaches to partners, and engage in whole-class discussions to compare and reflect on which strategies were most helpful and why. This process supports students in considering the clarity, accuracy, and efficiency of different solution methods.

In Mission 4, Lesson 2, students explore multiple strategies to represent teen numbers using linking cubes, place value charts, and hide zero cards. Teachers guide students to reflect on the efficiency of using pictorial versus symbolic representations as numbers increase, encouraging flexible use of tools based on context. Follow-up discussions help students evaluate how tools like the place value chart support decomposing numbers into tens and ones, fostering both accuracy and strategic thinking.

Throughout learning pathways, materials prompt students to analyze their solution strategies by comparing different mathematical models, such as number bonds, number sentences, and drawings. For instance, in Mission 6, Lesson 13, students solve two-digit addition problems with various representations and reflect on which methods were easier or faster, promoting an understanding of flexibility and efficiency. Similarly, in Mission 2, Lesson 13, students check the consistency of their solutions across models, supporting evaluation of accuracy and alignment with problem contexts.

5.2d – Materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems.

In Mission 1, Topic A, students revisit decomposing numbers within 10 using 5-group configurations to build more efficient mental math strategies like counting on from 5 instead of counting all. This conceptual subitizing supports students in selecting faster approaches to addition as they progress to larger numbers.

In Mission 4, Lesson 5, and Mission 3, Lesson 8, teacher guidance encourages students to identify and use efficient strategies such as drawing quick tens on place value charts and organizing data into groups (e.g., groups of 5,) to support more efficient counting and computation. Discussions prompt students to articulate their reasoning and refine their problem-solving approaches.

In Mission 6, students build on place value understanding to compare and represent numbers up to 120 using blocks, number disks, and place value charts. Teachers guide students to focus on the tens place rather than one-to-one counting, prompting reflection on how adding tens differs from adding ones. This helps students select increasingly efficient methods, reducing cognitive load and enhancing strategic computation.

5.3 Balance of Conceptual Understanding and Procedural Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.3a	All criteria for guidance met.	2/2
5.3b	All criteria for guidance met.	3/3
5.3c	All criteria for guidance met.	6/6
—	TOTAL	11/11

5.3a – Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.

The "Progression of Mathematical Concepts" and "Rationale for Mission Sequence" found in the "Course Overview" explicitly state how the conceptual and procedural emphasis of TEKS are addressed. These sections outline how key mathematical ideas are intentionally introduced, developed, and extended across missions and grade levels. For example, Mission 1 focuses on building number sense through composing and decomposing numbers within ten, while Mission 2 builds procedural fluency with numbers up to 20 by introducing strategies like making ten and solving multi-step problems—laying the foundation for future TEKS-aligned learning.

In the Mission 2, "Topic A Overview," the guidance explains that students develop conceptual understanding by exploring the make ten strategy alongside the associative and commutative properties. Procedural fluency is reinforced through repeated practice decomposing numbers to make ten and solving addition problems using multiple strategies.

In the Mission 4 Overview, students build a deeper understanding of place value by applying number relationships within 40, using knowledge of tens and ones. Through hands-on tools like linking cubes, finger modeling, and coins, students explore counting strategies, expanded form, and decomposing two-digit numbers, reinforcing the concept of ten as a unit and supporting conceptual development aligned with the TEKS.

5.3b – Questions and tasks provide opportunities for students to use concrete models, pictorial representations, and abstract models as required by the TEKS.

Questions and tasks provide opportunities for students to use concrete models, pictorial representations, and abstract models, as required by the TEKS. In Mission 2, Lesson 4, students begin with linking cubes to model $9 + 3$, then transition to drawing representations on whiteboards using ten-frames, and finally write the corresponding number sentences. This progression supports students in developing a deep understanding of addition by connecting physical, visual, and symbolic representations.

In the Mission 2 Overview, materials state that students engage in tasks that support the use of pictorial representations and abstract models, as required by the TEKS. In "Topic B," students begin by solving subtraction problems involving 9 and 10 using concrete manipulatives, then transition to drawing pictorial representations and number bonds. This progression supports the development of conceptual understanding by connecting visual models to symbolic reasoning.

In Mission 2, Lesson 1, students engage in tasks that incorporate concrete, pictorial, and abstract models, as required by the TEKS. Students begin by using physical pattern blocks to count and determine quantities, then collaboratively write an equation on the board to represent the total. They further develop this understanding by drawing representations of teacher-given problems and writing matching equations, supporting the progression from hands-on manipulation to symbolic expression.

5.3c – Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS.

Materials include support for students in connecting, creating, defining, and explaining concrete and representational models to abstract concepts, as required by the TEKS. For example, in Mission 4, Lesson 9, teacher materials provide structured guidance to help students transition from using ten sticks to draw representations and finally compare numbers without visual aids. Teacher prompts encourage students to explain their thinking, such as focusing on the digit in the tens place to compare numbers, fostering a clear connection between concrete models, pictorial representations, and abstract numerical concepts.

In Mission 4, Lesson 2, teacher materials guide students to use place value charts and manipulatives like ten sticks and cubes to represent numbers such as 17, labeling them as one ten and seven ones. As numbers increase, students transition from using linking cubes and pictorial drawings to relying on place value charts, with teacher prompts supporting the shift from concrete to more abstract representations.

In Mission 1, Topic C, students begin by solving addition word problems using concrete counting and visualization strategies with result unknown (e.g., "5 kids are dancing. 3 more kids join them. How many kids are dancing now?"). They then progress to more abstract problem types, such as change unknown problems (e.g., "Ben has 5 pencils. He got some more from his mother. Now he has 9 pencils. How many pencils did Ben get from his mother?"), facilitating a gradual shift from concrete to abstract mathematical reasoning.

5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	1/1
5.4b	All criteria for guidance met.	2/2
5.4c	All criteria for guidance met.	1/1
5.4d	All criteria for guidance met.	2/2
5.4e	All criteria for guidance met.	2/2
—	TOTAL	8/8

5.4a – Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, or other language development strategies.

The materials provide opportunities for students to develop academic mathematical language through manipulatives. For instance, in Mission 2, Lesson 19, students use their fingers and a number path to explore subtraction with the term *count on*, and in Mission 5, Lesson 1, students create "open" and "closed" shapes using straws to reinforce geometry vocabulary.

Visual supports are embedded throughout the materials to strengthen students' understanding of mathematical terms. In Mission 2, Lesson 4, teachers are guided to post labeled visuals of ten- and five-frames to support emergent bilingual students, and in Mission 3, Lessons 1 and 11, students reference graphs and anchor charts to discuss and analyze mathematical information using precise vocabulary.

The materials use sentence stems, partner discussion, and teacher modeling to support language development. For example, in Mission 2, Lesson 2, students use visuals and sentence stems to explain how they make ten with three addends, while in Mission 3, Lesson 5, students use manipulatives, number bonds, and drawings during partner tasks to verbalize strategies using terms like *efficient* and *make ten*.

5.4b – Materials include embedded educator guidance to scaffold, support, and extend students' use of academic mathematical vocabulary in context when communicating with peers and educators.

The materials offer embedded educator guidance that scaffolds vocabulary development through modeling, sentence frames, and structured peer interactions. In Mission 5, Lesson 3, students describe shapes using attributes, and teachers are encouraged to circulate and note language use. Similarly, in Mission 6, Lesson 9, students use place value language to describe numerical changes, and "Turn and Talk" routines help them explain their thinking with precision.

Educators are guided to deepen students' academic language by prompting reflection and encouraging precise vocabulary during mathematical discourse. In Mission 3, Lessons 4 and 6, students use tools and comparative terms like "longer," "shorter," and "about" to discuss measurement tasks, while teachers

support their language use with sentence stems, word banks, and targeted questions to extend vocabulary use during partner conversations.

The materials reinforce academic vocabulary with visual aids, manipulatives, and real-world examples to promote understanding and contextual use. For instance, in Mission 6, Lesson 4, students use sentence frames to describe two-digit numbers in context, and in Mission 5, Lesson 2, critical vocabulary like "characteristic" and "attribute" is reinforced through classroom modeling and environmental descriptions, helping students communicate with peers and educators using precise mathematical language.

5.4c – Materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse.

The materials embed sentence stems and structured routines to support students, including emergent bilinguals, in applying academic math language. For example, in Mission 4, Lesson 10, and Mission 6, Lesson 4, sentence frames like "___ is greater than" or "___ is more than ___" help students articulate comparisons using precise language.

Teachers are guided to highlight and reinforce terms like attribute, greater than, or centimeter during instruction. In Mission 5, Lesson 2, and Mission 3, Lesson 2, students are prompted to discuss shapes and measurement with attention to precise vocabulary and concepts such as aligning endpoints and using standard units.

Lessons include embedded discourse strategies like "Turn and Talk," "Think-Pair-Share," and guided partner conversations. These routines, seen in both Mission 3 and Mission 5, allow students to verbalize reasoning, clarify misunderstandings, and engage with academic language in context.

5.4d – Materials include embedded guidance to facilitate mathematical conversations allowing students to hear, refine, and use math language with peers.

The materials embed routines like "Turn and Talk," "Think-Pair-Share," and sentence frames across lessons to encourage students to verbalize math reasoning. For example, in Mission 5, Lesson 3, students describe shapes using their attributes, such as, "It has 6 straight sides and 6 corners." These routines help students hear precise math language from peers and refine their own responses.

In Mission 2, Lesson 10 and Mission 5, Lesson 9, the materials provide structured teacher guidance that promotes peer discussion and mathematical language use. Students explain their thinking using number bonds and full number sentences when solving with the make ten strategy. In the composite shape game, students describe and replicate partner-created structures using spatial and geometric vocabulary, supporting language development through hands-on dialogue.

In Mission 3, Lessons 1, 2, and 5, teachers guide reflective discussions to surface misconceptions and promote deeper understanding. Students compare measurement methods and justify reasoning, such as explaining why different tools or units lead to different results. These conversations provide opportunities to process, clarify, and accurately apply mathematical language in peer interactions.

5.4e – Materials include embedded guidance to anticipate a variety of student answers including exemplar responses to questions and tasks, including guidance to support and/or redirect inaccurate student responses.

The materials include support for redirecting inaccurate student responses. For example, in Mission 4, Lesson 3, the "Concept Exploration" includes guidance around an inaccurate student response: students naming that 34 is just made of 4 ones, instead of 34 ones or 3 tens and 4 ones. After hearing this inaccurate response, the teacher asks students follow-up questions and prompts them to use their fingers to model the number and correct their understanding.

The materials include embedded guidance with exemplar responses but do not anticipate a variety of student answers or provide strategies to redirect inaccurate responses. For example, in Mission 2, Lesson 7, during a fluency activity, the materials provide an exemplar response to the equation " $9 + 6 = 10 + \underline{\quad}$ " and guide the teacher to have students repeat the correct equation if an incorrect answer is given, but the materials do not include teacher guidance for addressing inaccurate responses.

5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	All criteria for guidance met.	2/2
5.5c	All criteria for guidance met.	1/1
—	TOTAL	4/4

5.5a – TEKS process standards are integrated appropriately into the materials.

The materials integrate the TEKS process standards appropriately into instruction. According to the "Course Guide," each lesson is intentionally designed to embed the TEKS Mathematical Process Standards (MPS), providing opportunities for reasoning, modeling, communication, and problem-solving (process). These process standards are incorporated throughout lessons to ensure students engage meaningfully with grade-level mathematics.

In Mission 2, Lesson 4, students communicate mathematical ideas by discussing measurement comparisons (content) using sentence stems and visual models. This aligns with TEKS 5.1D, supporting students in justifying their thinking and using precise mathematical language (process). The materials integrate TEKS process standards in meaningful and consistent ways to strengthen conceptual understanding.

Tasks and discussions are structured to promote application of the process standards alongside content skills. For example, in Mission 4, Lesson 7, students use manipulatives and vertical addition strategies (content) to solve problems, then explain (process) each step to a partner. This integrates TEKS 5.1G and 5.1F, as students make and defend connections (process) between concrete models and abstract representations.

5.5b – Materials include a description of how process standards are incorporated and connected throughout the learning pathways.

The materials include a description of how process standards are incorporated and connected throughout the learning pathways. In Mission 5, the "Mission Overview" describes how Process Standard 1E is incorporated throughout the mission. It states that students use representations such as drawings, straws, and cubes to explore shape composition and partitioning, and later apply these visual tools to understand fractions and time. These examples show how the standard is woven into multiple contexts to support ongoing development of representational thinking.

In Mission 1, materials include a description of how Process Standard 1F is incorporated across the learning pathway. The overview explains that students analyze number relationships by decomposing numbers and connecting those relationships to addition and subtraction strategies. This intentional

progression supports students in building flexible problem-solving strategies from the start of the mission.

5.5c – Materials include an overview of the TEKS process standards incorporated into each lesson.

The materials include an overview of the TEKS process standards incorporated into each lesson, as outlined in the "Course Guide." A table titled "Mathematical Process Standards By Lesson per Mission" identifies which process standards are addressed in each lesson. For example, 1.1B is addressed in Mission 4, Lessons 16–18.

In addition to the "Course Guide," each "Mission Overview" includes a section called "Focus TEKS Process Standards" that outlines how individual process standards are integrated. For example, in Mission 4, process standard 1.1B is explained with teacher background detailing how students use structured strategies—such as drawing representations and writing justifying equations—to build reasoning and problem-solving skills.

The "Mission Overview" provides detailed explanations of how process standards are implemented throughout instruction. In Mission 1, the overview describes how 1.1F is addressed by guiding students to analyze relationships between numbers, such as decomposing numbers (e.g., $8 = 5 + 3$), and connecting that understanding to flexible addition and subtraction strategies, ensuring a strong conceptual foundation.

6. Productive Struggle

Materials support students in applying disciplinary practices to productive problem-solving, including explaining and revising their thinking.

6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	All criteria for guidance met.	3/3
6.1c	All criteria for guidance met.	3/3
—	TOTAL	9/9

6.1a – Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics.

The materials support students in thinking mathematically by encouraging reasoning and analysis of different problem types. For instance, in Mission 4, Lesson 3, students engage in evaluating a peer's mathematical misconception and are prompted to justify their reasoning with questions like, "Do you agree? Why or why not?" These opportunities promote critical thinking and mathematical discourse.

Students are encouraged to persevere through multi-step and open-ended problems. In Mission 4, Lesson 5, the word problem asks students to solve real-world addition and subtraction tasks within 20 using drawings, words, and number sentences. The lesson builds on previously learned strategies and challenges students to apply their understanding flexibly and independently in multiple ways.

Materials prompt students to make sense of mathematical relationships through visual models and reflection. In Mission 4, Lesson 16, students solve problems using strip diagrams and then engage in partner discussions to explain their thinking. During the "Lesson Synthesis," students analyze diagram structures to deepen understanding of part-whole relationships and mathematical representation.

6.1b – Materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks.

Materials consistently support students in recognizing that there are multiple valid strategies for solving problems. For example, in Mission 2, Lesson 2, students examine two different strategies for solving the same addition problem (e.g., $5 + 3 + 5$), identify similarities and differences, and conclude that both strategies are correct. Similarly, in Mission 4, Lesson 14, students explore different representations of place value using coins and discuss alternate ways to show the same quantity.

Students are regularly prompted to explain and compare their own methods with others'. In Mission 2, Lesson 6, partners solve the same problem using different approaches to making ten (e.g., with 5 vs. with 9), and then explain how each strategy works. In Mission 4, Lesson 13, students are asked to write two

number sentences using the same values but different comparison symbols and explain how their reasoning differs for each.

Lessons include guided discussions and teacher prompts that require students to justify their chosen strategies. In Mission 4, Lesson 11, students reflect on methods used to compare numbers (e.g., number lines, quick tens, linking cubes) and justify which strategy they found most helpful. In Mission 4, Lesson 17, the "Lesson Synthesis" guides students to articulate how their strip diagram representations support different but accurate problem-solving approaches, reinforcing that multiple strategies are valid and meaningful.

6.1c – Materials are designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with peers and/or educators.

Materials consistently include structured opportunities for students to engage in math collaboratively. In Mission 4, Lesson 13, students participate in the "Compare It!" game, where they write numbers, place symbols, and validate number sentences with a partner using number lines. Similarly, in Mission 2, Lesson 11, students solve word problems and then analyze and compare their partner's strategy, promoting collaborative problem-solving and strategy sharing.

Students regularly write to represent and communicate mathematical thinking. For instance, in Mission 4, Lesson 10, students write comparison statements using place value charts to compare quantities. In Mission 4, Lesson 4, partners take turns writing number sentences and "more than" statements based on decomposed numbers, allowing them to explore multiple representations of addition in writing.

Dialogue and discussion are embedded throughout the materials to help students make sense of mathematics. In Mission 3, Lesson 20, students explain their subtraction strategies aloud to partners. In Mission 4, Lesson 11, teacher prompts and partner talk are used to compare digits and justify conclusions about place value and relative size, reinforcing understanding through verbal reasoning.

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	6/6
6.2b	All criteria for guidance met.	4/4
—	TOTAL	10/10

6.2a – Materials support educators in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications.

Materials support educators in guiding students to share their problem-solving approaches through explanations, arguments, and justifications. For example, in Mission 1, Lesson 24, students explain what happens when 1 is added to a number using examples like $3 + 1$ and $2 + 1$. In Mission 5, Lesson 12, students engage in argumentation by choosing between one-half or one-quarter of a pizza and explaining their preference.

Materials guide educators in helping students reflect on their own approaches to solving problems. In Mission 4, Lesson 17, students are prompted to assess and explain the reasonableness of their solutions and respond to peer feedback. In Mission 4, Lesson 11, students compare strategies for number comparison (e.g., linking cubes, number lines) and explain which was most helpful and why.

Lessons embed opportunities for students to evaluate, explain, and justify thinking to deepen understanding. In Mission 4, Lesson 3, students respond to mathematical claims and clarify misconceptions (e.g., "Is 2 tens and 9 ones equal to 9?"). In Mission 4, Lesson 14, students use coins to explain place value and justify whether showing 9 more will change the ones place.

6.2b – Materials include prompts and guidance to support educators in providing explanatory feedback based on student responses and anticipated misconceptions.

Materials offer guidance and prompts for teachers to provide explanatory feedback based on anticipated misconceptions. Notes are embedded directly within the "Concept Exploration" portion of a lesson and labeled "Anticipated Misconceptions." The structure includes: a likely misconception based on student responses, guidance that includes an explanation, and one or more suggested prompts or teacher moves to address the misconception and guide students toward proficiency.

The materials include clear prompts and guidance to help educators respond to student responses. In Mission 2, Lesson 1, the teacher is guided to ask follow-up questions such as "Can we make ten since it is such a friendly number?" as students solve problems like $9 + 1 + 4$. These prompts help teachers extend students' thinking and guide them toward efficient strategies like making ten.

In Mission 2, Lesson 2, educator guidance is evident by offering insight into how students may approach a problem differently, such as starting with eight instead of two in the equation $2 + 4 + 8$. The teacher is

guided to recognize and discuss these strategies with students, reinforcing that the order of addends does not affect the sum. Additionally, the "Multiple Means of Engagement" section offers support on how addends should be chosen so that students can readily identify partners to ten.